Written Statement of the
National Petrochemical & Refiners Association

delivered by
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before the
Subcommittee on Energy and Air Quality of the House Committee on Energy and Commerce

concerning
Natural Gas and Heating Oil for American Homes

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Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear today to discuss issues related to petroleum refining and the home heating oil market. My name is Bob Slaughter and I am President of NPRA, the National Petrochemical & Refiners Association. NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, and most U.S. petrochemical manufacturers.

Today's hearing focuses on important and timely issues. The cost and availability of natural gas presents a challenge for both refiners and petrochemical producers. Refiners use large quantities of natural gas and petrochemical producers depend on natural gas supplies for use as feedstock. NPRA urges that Congress take immediate action to increase domestic natural gas supplies by opening up to exploration and production OCS areas currently subject to moratoria. The nation can no longer afford to place off limits critical supplies of natural gas that are needed for residential, commercial and industrial use. The nation is in the process of exporting the U.S. petrochemical industry due to concerns about the availability and cost of future natural gas supplies. Action is needed in short order to protect the hundreds of thousands of U.S. jobs that depend directly or indirectly on the domestic petrochemical industry.

I have been asked to address my remarks today to trends in the home heating oil market. Given the tightness in refining capacity generally, the high cost of crude oil, damage caused by two major hurricanes and the strong pressure on the industry to continue to keep up gasoline production levels in light of consumer demand, challenging conditions have emerged for this winter's heating oil market.

A snapshot of current conditions

The nation’s refiners and petrochemical manufacturers have made considerable progress in recovering from the effects of hurricanes Katrina and Rita. Those storms at one time or other shut down roughly 30% of U.S. refining capacity. Hurricane Rita shut down about 16 major U.S. refineries. At the same time, the effects of Hurricane Katrina still lingered, as four major refineries remained offline due to the impact of that earlier storm. The refining industry has joined other sectors of the oil and gas industry in working around the clock to bring as much of the affected capacity back on

line as possible. A great deal has been accomplished. As of November 1, roughly 4 million barrels per day of refining capacity hit by the storms has returned to full operation. Most petrochemical facilities have also been returned to full operation after the storms.

Remaining offline at this date are four facilities: BP's Texas City refinery, which is shut down for repair; ExxonMobil/PDVSA's Chalmette refinery, which is expected to be fully operational later this month, ConocoPhillip's Belle Chasse refinery, and Murphy Oil's Meraux refinery, expected to start-up in the first quarter of 2006. The U.S. Energy Information Administration has noted that gasoline supply has returned to pre-Katrina levels with the help of significant gasoline imports during recent weeks. With most of the refineries restarted, domestic production has ramped up and import levels should eventually return to more usual volumes. EIA also announced yesterday a significant drop in U.S. average gasoline prices, returning to pre-hurricane levels. Due to continued high crude prices, however, current gasoline prices do remain above those in 2004.

There is also positive news regarding distillates, including home heating oil. During the key winter months of the home heating oil season, demand is met by refinery production, imports and inventory stocks. Refinery distillate production (as indicated in attachment one) have been higher than the average of the past four years for much of 2005. Inventories were reaching comfortable levels at the time of the hurricanes, but those supplies have been drawn down somewhat to provide supply during the time when refinery disruptions caused by the hurricane were most severe. (See attachment 2 for the magnitude of the storms' effect on refinery operations.)

The good news is that as of last week, U.S. distillate inventories, including both home heating oil and highway diesel, were slightly higher than the stocks on hand at this time last year. Strong demand for distillate worldwide has resulted in higher than normal prices for diesel when compared with gasoline for much of this year. Diesel prices have not yet returned to pre-Katrina levels, but EIA announced yesterday that diesel fuel prices fell by over 28 cents in the past week.

As with most winters, demand for home heating oil will be greatly affected by weather conditions. NOAA is projecting a slightly more severe winter than last year, but it remains to be seen whether that prediction will play out as anticipated. If additional heating oil supplies are needed beyond those

produced in domestic refineries, imports are likely to be available from Canada, the Virgin Islands, and perhaps Europe if winter conditions there are not severe. As always, a price spike can occur if supplies are temporarily short, but such situations are usually quickly addressed by the arrival of additional supplies in response to market incentives.

There has been much discussion at this hearing of concerns about natural gas supply during this winter. That situation could also impact the heating oil market. If interruptible gas customers abandon the natural gas market because of high gas prices this winter, they would rely on heating oil supplies to replace their usual fuel. Many utilities are required to hold reserve inventories of heating oil to address this eventuality, and it is to be hoped that this supply would act to mitigate the impact of additional, unexpected demand for home heating oil. The possibility that industrial natural gas customers might present additional challenges for home heating oil consumers is another good reason why Congress should not delay in taking action to increase domestic production of natural gas.

Refining and Home Heating Oil

Basically, our nation has two sources of heating oil: domestic petroleum refining and imports. For their part, refineries produce heating oil as a part of the "distillate fuel oil" product family that also includes diesel fuel. Distillate products are shipped throughout the United States by pipelines, barges, tankers, trucks and rail cars.

Past experience and EIA analysis confirm that refiners are limited in the amount of heating oil they can make during the winter to meet the demands of the October to March heating season. Some winter heating oil is produced by refineries in the summer and fall months and stored for winter use. During the coldest winter months, the inventories built in summer and fall are used to help meet the high demand. Refiners can increase heating oil production in the winter only to a modest degree.

As indicated previously, imports can make up the difference when distillate and heating oil stocks are low. Primary sources of imported distillate are Canada, the Virgin Islands, and Venezuela.

Whether imported or produced by domestic refiners, heating oil is then stored in a terminal that services a particular area served by retailers. For

example, heating oil may be delivered to a central distribution area, such as New York Harbor, where it is then redistributed by barge to other consuming areas, such as New England. Once heating oil is in the consuming area, it is redistributed by truck to smaller storage tanks closer to a retail dealer's customers, or directly to residential customers.

Current Supply/Demand Picture for Home Heating Oil

According to the U.S. Energy Information Administration, about 8.1 million households out of 107 million total use heating oil to heat their homes. This fuel oil is primarily used for residential space heating, a fact that creates great seasonal variations in demand. Home heating oil is a seasonal product, with most consumed between the months of October and March.

Home heating oil demand is also limited geographically, with households in the Northeastern United States consuming about 78 percent of total U.S. demand. While total demand has stayed about the same over the last year, residential and wholesale prices are up by 56 and 39 percent respectively. The reasons for volatility are clear.

Refiners have been working hard to address the lingering impacts of the summer's storms. The industry faced unprecedented logistical, facility, and personnel complications with the impact of two major storms in rapid succession. The dedicated employees of these facilities deserve most of the credit for the rapid return to service of so much capacity, as do their employers. The refining companies in many cases provided for the shelter, safety and security of these workers and their families. Despite so great a loss of productive capacity in such a short time, it is important to note that the nation experienced only very isolated and short-lived transportation fuel shortages.

NPRA commends the federal government for acting quickly and decisively in the face of these supply outages. Several steps taken in the days and weeks following these storms helped refiners provide consumers with the products they need. The Administration released crude oil from the Strategic Petroleum Reserve (SPR) to assist refiners who were short crude supplies as a result of hurricane damage. NPRA applauds this appropriate utilization of the reserve in a time of crude-oil supply crisis. The decisive steps taken to judiciously use crude oil from the SPR during this emergency enabled several refineries, otherwise unaffected by the storms,

to receive the crude oil required to keep the refineries in production.

NPRA also notes that the Environmental Protection Agency provided temporary fuel waivers that made it easier to supply fuels to affected areas. The waivers pertain to both gasoline and diesel specifications. NPRA appreciates the efforts of EPA and commends the agency for its diligence in gathering the necessary information to protect both fuel supply and environmental concerns.

The Department of Homeland Security also deserves recognition for temporarily lifting Jones Act requirements in order to allow non U.S. flagged vessels to transport much needed refined products from one U.S. port to another. These actions provided additional flexibility to the marketplace and have helped refiners to continue to meet demand.

Other Factors Which May Lead to Volatility in the Heating Oil Market

There is no one single answer for why home heating supplies can be tight, although the market has historically been a volatile one. Among the reasons for this are the following:

1. Seasonality of demand. Because heating oil is essentially a winter product, the laws of supply and demand dictate that consumers feel the greatest pinch precisely at the time when heating oil is in the most need. While transportation fuels are somewhat seasonal (particularly gasoline), the demand curve is not nearly so biased towards one season as is the demand curve for heating oil. As a result, moderate changes in distillate inventories can have relatively profound impacts on the heating oil market.

Data collected over the last few weeks show that unusually warm weather in the Northeast has dampened demand for fuel oil and resulted in stable distillate supplies. These factors have resulted in futures price declines, as November contracts have given way to December trading, according to data reported by Bloomberg. However, heightened demand overseas, coupled with interrupted distribution attributable to this summer's hurricanes may create rather volatile conditions. Rapid changes in temperatures or prolonged storms can result in spikes in demand at the very time when some infrastructure (harbors, barge traffic, truck traffic, etc) are constrained for making deliveries at optimal rates.

2. Crude oil costs. Just as with gasoline production, one of the greatest cost

factors affecting home heating oil is the cost of the underlying crude oil input. Crude prices are of course a product of worldwide supply and demand factors well beyond the control of the refiner or the heating oil vendor. In particular, heightened crude demand in India and China has affected the crude market. Crude input accounts for approximately 42 percent of heating oil cost.

3. Competition in local markets. While NPRA does not represent the retail sector, we can point out some obvious characteristics of retail markets. Some heating oil markets are served by multiple vendors, whereas others may have only one primary vendor. As a result, not all local retail markets are as competitive as might be the case under optimal conditions.

4. Differential overhead. The retailing of home heating oil is labor intensive and can be complicated from a logistical point of view. Some of the most significant markets for heating oil have a relatively high cost of doing business, and do not always react as quickly to market stimuli. EIA recently stated that "Prices also are impacted by higher costs of transporting the product to remote locations. In addition, the cost of doing business by dealers can vary substantially depending on the area of the country in which the dealer is located. Costs of doing business include wages and salaries, benefits, equipment, lease/rent, insurance, overhead, and state and local fees." Distribution and marketing costs alone account for some 46 percent of the cost of a gallon of heating oil.

5. Fuel switching. Demand for home heating oil is roughly the same as it was last year at this time (4.293 mmb on 10/26/2005 compared to 4.368 mmb a year ago, a change of only -0.075). As previously mentioned however, with the price of natural gas substantially above its historic average, and with some homes in the Northeast capable of utilizing either gas or oil heating, there may be some switching from natural gas to fuel oil, but this is difficult to predict.

Addressing Volatility in the Heating Oil Market

Some policymakers have suggested that the federal government should adopt price control mechanisms on heating oil and other refined products, sometimes at the wholesale level, to combat the current rise in fuel prices. NPRA urges Congress to reject this advice.
As previously noted, in the immediate aftermath of both Hurricanes Katrina

and Rita, there were but a few reports of supply shortages or market distortion. Reliance on market forces provided appropriate market signals to help balance supply and demand even during these difficult times. Enactment of politically tempting but marketplace disrupting price controls is absolutely the wrong cure for the situation. President Reagan eliminated price controls on oil products immediately upon taking office in 1981. He was outspoken about the inefficiencies and added costs to consumers that resulted from America's ten-year experiment with energy price controls during the 1970s.

The energy price and allocation controls of the 1970s resulted in supply shortages in the form of long gas lines. Studies have shown that, although intended to reduce costs, controls actually resulted in increased costs and greater inconvenience for consumers. The benefits of market pricing became clear soon after the elimination of price and allocation controls in 1981. The U.S. Federal Trade Commission stated in an extensive study published this June that the price of refined products over the past two decades has been on average lower than any time since 1919. It is important to note that a "windfall profit tax" is merely another form of price control. Price caps and other forms of price regulation are no more effective in the 21st century than they were in the 1970s. Interference in market forces always creates inefficiencies in the marketplace and extra costs for consumers.

There are numerous, more market sensitive, strategies available to consumers and policy makers that can address heating oil volatility or at least somewhat ameliorate its consequences.

Some heating oil consumers, in recognition of potential price increases, may fill their storage tanks during lower demand periods. While most homeowners do not possess sufficient storage capacity for an entire winter, such behavior can address price increases during shoulder or transitional seasons. Consumers may, therefore, arrange to have their tanks filled in late summer or early fall when prices are generally lower.

In addition, many of the nation's 9300 heating oil retailers offer budget plans or fixed price protection programs to help stabilize monthly bills. Home energy audits can also ensure that furnaces and other appliances are running efficiently before the season begins. Conservation gains attributable to weatherizing (i.e., installing the proper insulation in houses and around

hot water heaters) as well as caulking and weather stripping windows and doors to seal out cold air also help save energy. Installing a programmable thermostat is another way to reduce heating fuel costs.

For those living on fixed incomes or under other significant budget limitations, both Federal and State energy assistance programs are available. For example, the Low Income Home Energy Assistance Program (LIHEAP) is a Federal program that distributes funds to States to help low-income households pay heating bills. Additional State energy assistance and fuel fund programs may be available to help households during a winter emergency.

Thank you again for the opportunity to discuss this important issue of winter fuel supply with you today. I look forward to responding to your questions.